Claims

What is claimed is:

[c1] A method for creating a wire load model, comprising:

creating an interconnect configuration;

running a field solver to generate parasitic information for the interconnect configuration;

storing the parasitic information in an accessible format; and

running a curve-fitting engine to create the wire load model, wherein running the curve-fitting engine is dependent on the parasitic information.

The method of claim 1, wherein a range of widths and spacings for the interconnect configuration are chosen so that widths and spacings are larger than a minimum width and spacing specification for the interconnect configuration.

- [c3] The method of claim 1, wherein the accessible format is a look-up table for the range.
- [c4] The method of claim 1, wherein the curve-fitting engine is a non-linear curve-fitting engine.
- [c5] The method of claim 1, wherein the parasitic information comprises at least one selected from the group consisting of an area capacitance, a coupling capacitance, and a fringe capacitance.
- [c6] A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method for creating a wire load model, the method comprising:

creating a wire structure;

[c2]

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[c7]

running a field solver to generate parasitic information for the wire structure;

storing the parasitic information in an accessible format; and

running a curve-fitting engine to create the wire load model, wherein running the curve-fitting engine is dependent on the parasitic information.

- The method of claim 6, wherein a width and a spacing for the wire structure is chosen so that the width and spacing is larger than a minimum width and spacing specification for the wire structure.
- [c8] The method of claim 6, wherein the accessible format is a look-up table.
- [c9] The method of claim 6, wherein the curve-fitting engine is a non-linear curve-fitting engine with an error control mechanism.
- [c10] The method of claim 6, wherein the parasitic information comprises at least one selected from the group consisting of an area capacitance, a coupling capacitance, and a fringe capacitance.
- [c11] A computer system, comprising:
 - a memory for storing a model of a circuit;
 - a processor for creating a wire load model, wherein the processor establishes an interconnect configuration for the circuit;
 - a field solver for determining parasitic information for the interconnect configuration; and
 - a curve-fitting engine that uses the parasitic information to generate the wire load model.
- [c12] The method of claim 11, wherein a width and a spacing for the interconnect configuration is chosen so that the width and spacing is larger than a minimum

width and spacing specification for the interconnect configuration.

- The method of claim 11, wherein the curve-fitting engine is a non-linear curve-[c13] fitting engine!
- [c14] The method of claim 11, wherein the parasitic information comprises at least one selected from the group consisting of an area capacitance, a coupling capacitance, and a fringe capacitance.
- [c15] A method for creating a wire load model, comprising:

creating an interconnect configuration;

generating parasitic information for the interconnect configuration; storing the parasitic information in an accessible format; and creating the wire load model dependent on the parasitic information.

- The method of claim 15, wherein generating parasitic information uses a field solver.
- [c17] The method of claim 15, wherein creating the wire load model uses a non-linear curve-fitting engine.
- [c18] The method of claim 15, wherein the parasitic information comprises at least one selected from the group consisting of an area capacitance, a coupling capacitance, and a fringe capacitance.
- [c19] A wire load model creation tool, comprising:

means for creating an interconnection configuration for a structure;

means for field solving the interconnect configuration to determine parasitic information;

means for storing the parasitic information;

curve-fitting means for curve-fitting the parasitic information and using



interconnect configuration parameters to create a wire load model;

and

means for controlling error in the curve-fitting means.